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AVAILABILITY OF MATERIALS AND SCHOOL MATERIALS UTILIZATION IN IMPLEMENTING COMPETENCE BASED CURRICULUM IN SELECTED NINE YEARS BASIC EDUCATION OF NYAMASHEKE DISTRICT, RWANDA

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Abstract:
The purpose of the study was to examine the influence of availability of materials and school materials utilization in implementing competence-based curriculum in selected nine years basic education in Nyamasheke district. The study was guided by the following research questions i) What is the level of competence based curriculum physical school materials availability in selected nine years basic education of Nyamasheke District? ii) What is the level of competence based curriculum human school resources availability in selected nine years basic education of Nyamasheke District? iii) What is the level of competence based curriculum financial school materials availability in selected nine years basic education of Nyamasheke District? iv) Is there a significant relationship between availability of materials and school materials utilization in selected nine years basic education of Nyamasheke District? A descriptive survey research design was used. Stratified sampling technique and purposive sampling were used to get a sample size of 81 respondents comprising 12 head teachers and 69 teachers. The research questionnaire was used to collect data. Data was analyzed using Pearson Product Moment Correlation Coefficient statistical techniques and stepwise multiple regression.

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It was found that physical school materials are available at a level expressed in terms of (Mean=2.50, SD=.83), and school resources availability with (Mean=2.33, SD=0.95) are not adequate in nine years basic education whereas financial school resources with (Mean= 2.71, SD=.93) are adequate. The study equally found that there was no correlation between physical resources availability, human resources availability and financial resources availability; they are not predictors of school materials utilization. Whereas administrative buildings, academic buildings with (β=.261, p value=.043 <.005), stationeries (β=.272, p value=.034<.05), school transport (β=.262, p value=.042<0.5) and school projects (β=-.247, p value=.41<.05) are statistically predictors of school materials utilization. The study recommends to the government of Rwanda through Ministry of Education to provide more school materials such physical educational resources, train human resources, increase budget for educational resources in order to be able to implement competence based curriculum in nine years basic education.

Keywords: competence-based curriculum, school materials utilization, nine years basic education and availability

1. Introduction

Educational resources are used to improve students' knowledge, abilities, and skills, to monitor their assimilation of information, and to contribute to their overall development and upbringing. There are different types of educational resources such as physical, human and financial resources. The government of Rwanda reviewed the programs and teaching methods in order to acquaint its citizens with knowledge, skills and attitudes so that they can compete on global market. Competence based curriculum has been put in place to propel Rwanda to economic development (MINEDUC, 2015). Human resource development has been identified as of the main important element contributing to development of the country (MINECOFIN, 2003).

Instructional materials are objects and phenomena as minerals, rocks, raw materials; semi-finished and finished manufactured articles, and plant and animal specimens. Among available materials are reagents, apparatus for producing chemical and other reactions for demonstrating and studying such reactions during laboratory sessions. Among such supplies, instruments, and equipment are wood, metal, plastic, and glass objects, measuring and monitoring instruments and equipment for the assembling and finishing of various products, and machine tools (Moronfola, 2002).

Popoola (1980) stated that Educational materials are also the representations of actual objects and phenomena, categorized in three-dimensional materials (castings, globes, and experimental models), two-dimensional materials (charts, pictures, photographs, maps, diagrams, and drawings), and audiovisual materials (motion pictures, film clips, filmstrips, slide sequences, diapositives, transparencies, records or tape recordings, radio and television broadcasts). Audiovisual materials including the resources of films, radio, and television help acquaint students with the achievements of

modern science, technology, industry, and culture and with phenomena that are inaccessible to direct observation. Audiovisual materials also acquaint students with early periods of history and with distant places in the world and in space. Such materials elucidate natural and social phenomena and enable students to study the inner world of matter and the internal motion of waves, elementary particles, atoms, molecules, and living cells.

Nine years basic education schools are provided by government funding. More than ninety percent of children today in Rwanda attend nine years basic education schools. Considering the relationship between educational resources and students' academic performance, teacher's qualification and adequate facilities may be determinants of assessing academic performance of students. Hence the availability or non-availability of facilities and their adequacy in schools have an effect on the academic performance of pupils in primary schools of Rwanda. This is in agreement with some educationalists who believe that teaching materials facilitate teaching and learning activities, which result in effective teaching and improve academic performance. The school is an essentially human organization because it has human operatives, clients and products, hence students' performance has positive relationship with the quality of teachers. The importance of adequate staffing of a school is clearly demonstrated by the way parents continue to drift from one school to another in search of school with better - qualified teachers. For efficient educational management, facilities help the school to determine the number of pupils to be accommodated, number of teachers and non-teaching personnel to be employed and the cost for the efficient management of the school system.

The school climate is determined by the resources, especially classrooms under which the teachers and pupils operate which influences attitude in teaching and learning. Un-conducive classroom creates stress on teachers and pupils resulting in negative attitude toward school and learning by pupils. Facilities below approved standards could also lead to reduction in quality of teaching and learning in schools causing poor pupils' academic performance.

The school environment affects academic achievement of pupils. Facilities such as desks, seats, chalkboards, teaching aids, and cupboards are ingredients for effective teaching and learning. A good education policy or programmes to guarantee quality outputs must be serviced optimally with appropriate trained and motivated teaching staff, adequately supplied with necessary facilities and equipment. In the early colonial days, education in Rwanda developed because of the initiative of voluntary organizations especially those of the Christian missionaries. Good educational facilities during those days were only available to a small elite group and the masses remained largely illiterate or poorly educated.

Rwanda suffered devastation in the 1959s owing to civil strife and wars. The infrastructures in educational institutions were virtually run down and in addition, the country lost most of its trained manpower mainly through brain-drain. In a bid to address the situation, the Government of Rwanda conducted studies and analyses and produced

policies on education. It is on the basis of this that appropriate legal framework, organizational and management structure, strategic investment plans and program reform were developed.

Government program reforms were mainly to address the issues of access, equity and quality. Mukabaranga, (2003) opined that as a result of two decades of war and civil strife in Rwanda, the education system, especially at lower levels, suffered from years of neglect. This resulted into poor quality, poor enrolment for primary school level and high drop-out rate in lower grades; high attrition rate and a low completion rate at primary school level; dramatic difference in enrollment between geographical locations and individual schools and an overall system showing inefficiency in terms of total cost per child. In addition, parental contributions to school maintenance (including partial support to teachers' salaries) accounted for all school financial requirements.

2. Problem Statement and Research Questions

It has been observed that most nine years basic education schools in Rwanda usually record mass failure in national Examination. This observed poor performance motivated the researcher to conduct an investigation on the observed problem and find out the relationship that exists between the availability of materials and school materials utilization in nine years basic education in implementing competence based curriculum in Nyamasheke District.

MINEDUC (1997) attaches great importance to the development of education for it recognizes the fact that education is a powerful tool for transformation of society. Education plays a key role in achieving moral, intellectual, ideological, cultural and social development of the people in the society as well as national goals of unity, democracy, reconciliation, financial progress and security for all its citizens (MINECOFIN, 2003). The government of Rwanda according to the Ministry of Education is fully conscious of the problems it is facing in its effort to cause rapid development of education.

In the light of the above scenario, the prevailing problem which this study intends to investigate is the failure of the availability of materials, the misappropriation of materials and failure to effectively utilize them leading to several undesirable outcomes such as failure in academic performance, low promotion rates, lack of effectiveness among teachers and failure to compete with other schools. The main objective of this study is to examine the influence of availability of materials on school materials utilization in implementing competence-based curriculum in selected nine years basic education of Nyamasheke district. Specifically, the study seeks to respond to these questions: i) What is the level of competence based curriculum physical school materials availability in selected nine years basic education of Nyamasheke District? ii)What is the level of competence based curriculum human school resources availability in selected nine years basic education of Nyamasheke District? iii) What is the level of competence based curriculum financial school materials availability in selected nine years basic education of Nyamasheke District**? iv)** Is there a significant relationship between

availability of materials and school materials utilization in selected nine years basic education of Nyamasheke District?

3. Theoretical and Empirical Literature

This study is based on the open systems model which looks at an organization as a complex living organism which interacts with its environment (Morgan, 1986). The organization is depicted as distinct and separate from its external environment but with permeable and often ill-defined boundaries. It is a purposeful entity producing output which it exchanges with stake holders in its external environment in return for resources and support and so is dependent upon its environment.

The model also focuses on how the relationships between resource inputs and outputs are mediated by internal processes. Certain key elements, such as the methodology of organization's productive processes and the culture of its human relations are singled out for the study. These elements have important and interdependent effects on the process which relates inputs to outputs, and which connects the organization with its environment. The conversion process takes place when the inputs are organized, activated and subjected to various processes including teaching, learning, administration, planning and control mechanisms, all in the attempt to convert the human skills and materials into products, services and other outputs, that is, the intended changes in the behavior of students.

Educational resources are inputs in terms of human, financial, physical and time which are processed through the educational processes to produce outputs. Quality education is no doubt a function of the availability and utilization of input resources. The nature, sources, availability of human and non-human resources, may determine the efficiency of the school system (Nwankwo, 1979). According to Abdulkareem (2003), teachers in required quantity and quality, as well as materials for teachers and pupils in adequate number, must be available for use to ensure school success. It is one thing for facilities to be adequately provided; it is another thing for such facilities to be effectively utilized.

Infrastructure and poverty have been found to culminate in progressive and consistent deterioration in performance of both teachers and students (Adeyoju & Araromi, 1997). Okunamiri (2003) found out that whereas facilities were adequately provided in selected schools in Imo State, these facilities were not effectively utilized.

Hartshorne (1999) empirically claimed that the average black secondary school teachers were subjected to very heavy pressure, in most cases they teach at a level beyond their qualifications and academic background. In his study on African institutions and learning, he found out that African school climate is not adequate for the teaching and learning process.

Ndebola (2008) asserted in his investigation that the teaching strategies employed by a teacher and his or her interpersonal skills were two major influences on student behavior. The general sensitivity and efficiency with which this was done were likely to

produce strong effects on pupils' behavior. Pupil behavior was determined by the way the teachers went about their teaching and organization of the learning activities. Pupils' classroom behavior was much better when the teacher arrived on time to class, had prepared the lesson thoroughly and planned the teaching strategies thoughtfully (Rutter et al, 1979). The teacher by virtue of his position and functions in school plays a prominent role in the achievement of educational goals. The teacher is therefore seen as an important factor in the successful implementation of any educational programme (Adebola, 2008).

The negative models provided by teachers perhaps will attract pupils' attention more forcefully. Teachers who are never punctual, unfair and unjust in their evaluation or dealings with pupils, harsh and arbitrary in meting out punishment, send out wrong signals to pupils and influence them in an undesirable way (World Bank, 2004).

To be good and effective, a school should have a clear organization, characterized by stated missions, goals, values and standards of performance. It has to strive to create a professional environment for teachers that facilitate the accomplishment of their work (Chayya, 1997). Teachers participate in decisions affecting their work, have reasonable autonomy to carry out their work, share a sense of purpose and community, receive recognition, and are treated with respect and dignity and they enjoy a sense of pride and fulfillment in their profession. Such a school will have a principal, with a driving vision who imbues decisions and practices with meaning, placing powerful emphasis on why things are done, as well as on how they have to be done.

School physical facilities include classrooms, furniture, special rooms such as laboratories, workshops, store rooms, libraries, staff rooms and many others. According to Nwankwo (1983), if facilities are not available and or not enough, school effectiveness could never be achieved. Subbs (1995), on the contrary, in his study argues that the availability and utilization of resources may have no significant effect on school effectiveness but the environment where the school is located and parental or community involvement in school activities have a greater impact.

Akinwumiju (1987) found out that the provision of capital projects such as staff common room, teachers and pupil's furniture had significant relationship with pupil's academic performance. In the same angle, the finding agreed with Hallack (1990) revealed that physical facilities impact significantly on quality of students' instruction and thereby affecting the performance of students in the school.

Adesina (1980) further stressed in his investigation that variations in students' academic performance can be related to the availability or otherwise of physical facilities such as furniture and other related materials which are capital projects in nature. An institution that is well equipped with school infrastructure such as buildings (staff offices, library, lecture room and so on) has the capacity of encouraging staff and students to engage in teaching and learning process, class size determines the academic performance of pupils.

An overcrowded class is normally determined in terms of more pupils assigned to the building than it is designed to accommodate. Duffy's (1992) research shows that overcrowding causes a variety of problems and the findings indicated that pupils in

overcrowded schools and classrooms do not score as high on achievement tests as pupils in non-overcrowded schools and classrooms. Corcoran et al. (1988) reported that overcrowding resulted in a high rate of absenteeism among teachers and pupils. For the teachers, overcrowding results in stressful and unpleasant working conditions. Overcrowded schools and classes are noisier, and create more non- instructional duties and paperwork, and that without question, they inhibit teaching and learning (Rivera-Batiz and Marti, 1995).

Text books are scarce and expensive especially at primary level. It is estimated that only fifteen percent of the total instructional materials required are supplied by the government and or community. Therefore, pedagogical styles are basically didactic and students at all levels spend lots of time copying notes from the chalkboard into their books, supplementary readings are rare and to a larger extent unrelated to their environments and lifestyles. It is estimated that 50% of all primary schools have no permanent classrooms, while 40 and 10 percent have permanent and semi-permanent classrooms respectively. Further on average three to six pupils share a single desk and teachers have no rooms for preparations, so many are forced to work on verandas or under trees(MOE, Rwanda, 1998).

Providing text books to students who lack them seems to be an obvious way to improve educational performance. Textbook provision is almost universally accepted as an effective education policy, even by those who doubt the effectiveness of increased school spending (Glewwe, Kremer, Moulin and Sylvie, 2009). Empirical results show that providing textbooks to schools did not increase average test scores, although it did increase the scores of pupils with high initial achievement. The latter finding suggests that the official textbooks are ill-suited for the typical students and may reflect more fundamental problems with centralized educational systems, heterogeneous students' populations and entrenched elite power.

There is conclusive international evidence that the school library does contribute to academic achievement within schools (Hamilton-Pennell, 2000). Perhaps the most powerful recent evidence of the impact of school libraries on the educational programme comes from the large library. Power project of the late 1990s in the United States library grants were given to 700 schools in 19 school districts for resources, staff and accommodation to set up or improve their school library programmes and then the impact on various aspects of the educational programme was assessed (Haycock, 1999).

Reading the case studies of the various participant schools throws light on the value of the school library in the school, including schools with very few resources. In their discussion of the findings of the library Power project, Hopkins and Zweizig (1999) put well the case for school libraries: The library profession believes that authentic learning, involving the use of information to think critically, solve problems and to create personal meaning, is central to increasing learning for all pupils.

Buni (1993) found out that teachers' experience has no effect on teacher effectiveness, yet textbooks and other resources, school administration, finances, and teacher training impact much on effectiveness.

4. Research Design and Methodology

The research design for this study is descriptive survey design. The research respondents for this study were formed from a total sample size of 81, 12 head teachers and 69 teachers by using purposive sampling and stratified sampling. Questionnaire was used to teachers and head teachers as instrument designed by the researcher asking their perceptions on physical resources availability, human resources availability, and financial resources availability and determine the influence of availability of materials and school materials utilization. Data analysis has been used by using SPSS (version 2020).

5. Findings and Discussions

5.1 Level of School Materials Availability

In every education system of a country different school materials such as physical, human and financial play a crucial in the process of teaching and learning resources to achieve educational goals efficiently and effectively.

5.2 Physical School Materials Availability

Physical educational resources are very important in teaching and learning process, as different researchers revealed, adequate and effective utilization of physical school resources influence student achievement, it is in this regard that this study sought to determine the level of physical school resources availability in nine years basic education of Nyamasheke district. Table 4.1 describes the physical resources availability in nine years basic education of Nyamasheke.

Table 5.1: Physical School Materials Availability

Measures of physical school materials	Mean	Std. Deviation	Skewness		Rank
	Statistic	Statistic	Statistic	Std. Error	
school toilets	3.32	.649	-.427	.267	1
textbooks	3.12	.992	-.962	.267	2
special girls room with materials	2.96	.697	.050	.267	3
water tank	2.80	.781	-.280	.267	4
classrooms chairs for teachers	2.73	.822	-.285	.267	5
classroom boards	2.73	.881	-.673	.267	6
physics laboratory	2.70	.782	-.226	.267	7
students' computers	2.67	1.049	-.156	.267	8
students' desks	2.64	.899	-.174	.267	9
geometrical equipment	2.63	.887	-.515	.267	10
administrative offices	2.59	.703	.104	.267	11
atlases	2.56	.935	-.400	.267	12
classrooms space for students	2.54	.975	-.290	.267	13
classroom erasers	2.53	.896	-.523	.267	14
teachers tables	2.52	.743	-.439	.267	15
charts	2.43	.736	.130	.276	16

audio-visuals aids	2.43	.774	-.764	.267	17
biology laboratory	2.42	.788	-.121	.267	18
library	2.41	.787	-.396	.267	19
academic offices	2.40	.801	.203	.267	20
teachers' computers	2.37	1.054	.122	.267	21
stationeries	2.36	.747	.042	.267	22
maps	2.36	.926	.090	.267	23
sport ground	2.35	.661	.285	.271	24
material halls	2.30	.843	.157	.267	25
chemistry laboratory	2.25	.751	-.261	.267	26
school plants	2.14	.945	.268	.267	27
school transport	2.11	.742	.007	.267	28
diagrams	2.10	.875	.149	.267	29
projectors	2.05	.773	.081	.267	30
time keeper	1.90	.704	.143	.269	31
Total	77.42	25.598			
Average mean	**2.50**	**0.83**			

Table 5.1 shows the mean values for the scores of head teachers and teachers in nine years basic education of Nyamasheke district for the measures of level physical school resources availability. Respondents perceived that school toilets were high (Mean=3.32, SD=.649). Textbooks was also ranked as high (Mean=3.12, SD=.992). Teachers and head teachers ranked special girls room with materials as high (Mean=2.96, SD=.697). the following physical school resources such as water tank, classrooms chairs for teachers, classroom boards, physics laboratory, students' computers, students' desks, geometrical equipments, administrative offices, atlases, classrooms space for students and classroom erasers rated as high with mean values ranging between 2.50 and 3.50. Charts was rated as low (Mean=2.43, SD=.736), audio-visual aids ranked as low with (Mean=2.43, SD=.774), biology laboratory was rated as low (Mean=2.42, SD=.788). Other listed physical school resources such as library, academic offices, teachers' computers, stationeries, maps, sport ground, materials halls, chemistry laboratory, school plants, diagrams and projectors were rated as low with magnitude ranging between 1.76 and 2.50.

Finally, the results indicated in table 3.1 showed that the average mean of the respondents' perceptions on the level of physical school resources rated as low with (Mean=2.50, SD=.83). This result agreed with White (2004), he found that adequate and sufficient provided text books have impact on student performance. The study by Orodho et al. (2014) showed that school facilities specifically teaching materials had effect on quality of teaching and learning process, this study showed that physical educational resources was insufficient and this has negative impact on school materials utilization and student performance.

5.3 Human Resources Availability

Human resources with knowledge, skills, attitudes and values are very important in every education system, this is because trained qualified teaching staffs are the one to

prepare learning content, teaching materials, use competence based curriculum in teaching, evaluate students and manage time as good as possible. It is to be noted that adequate qualified teaching staff and non-teaching staff have impact on educational output , this study determine the level of human resources availability in selected nine years basic education of Nyamasheke district. The table 4.2 portrayed human resources availability in selected nine years basic education of Nyamasheke district.

Table 5.2: Human Resources Availability

Measures of human resources	Mean	Std. Deviation	Skewness		Rank
	Statistic	Statistic	Statistic	Std. Error	
Trained accountant	2.59	.88	-.125	.271	1
Deputy head teachers trained	2.46	.82	-.204	.267	2
Head teachers trained	2.30	.93	.235	.267	3
Trained patron	2.30	1.07	.202	.267	4
Teachers trained	2.22	1.00	.382	.267	5
Trained matron	2.14	1.02	.370	.267	6
Total	14.00	5.72			
Average mean	**2.33**	**0.95**			

Table 5.2 indicates trained accountant rated as high (Mean=2.59, SD=.88) as perceived by head teachers and teachers, Deputy head teachers trained was ranked as low with mean values (Mean=2.46, SD=.82), head teachers trained , trained patron, teachers trained and matron trained were rated as low with mean values ranging between 1.76 and 2.50. Finally, the findings indicated in table 5.2 showed that the perceptions from head teachers and teachers rated human school resources with average mean which is low (Mean=2.33, SD=0.95). The study conducted by Rivkin, Hanushek and Kain's study (2005) showed that teacher qualification and the professional experiences of teachers have a significant effect on mathematic achievement of students. Monk (1994) found that professional human resources trained such as teachers significantly affect students' performance.

5.4 Financial Resources Availability

Financial educational resources are the most important in education process, this is because they are used to fund school to have different educational materials such physical educational resource, recruiting and paying qualified human resources, teaching and learning resources and may others, it is clear that this study sought to describe the level of financial educational resources in Nyamasheke district. Table 4.3 indicates the financial resources availability in nine years basic education of Nyamasheke district.

Table 5.3: Financial Resources Availability

Measures of financial resources availability	**Mean**	**Std. Deviation**	**Skewness**		**Rank**
	Statistic	**Statistic**	**Statistic**	**Std. Error**	
text books	3.04	.93	-.772	.271	1
stationeries	2.96	.87	-.424	.274	2
school plants	2.95	.95	-.618	.269	3
classroom (audio-video aids, erasers, chairs, teachers tables and chairs	2.94	.97	-.471	.267	4
school transport	2.83	.88	-.255	.274	5
salary for maintenance and housekeeping staff	2.80	.87	-.412	.267	6
maintenance and housekeeping staff	2.76	.80	-.443	.271	7
laboratories	2.73	.87	-.280	.271	8
school projects	2.59	.91	-.024	.267	9
miscellaneous expenses (repairs, maintenance, sport, training	2.57	1.00	-.115	.267	10
materials hall	2.51	.99	-.057	.267	11
playgrounds	2.48	1.01	.088	.267	12
buildings (administrative and academic)	2.46	.95	-.053	.267	13
library	2.32	.96	.267	.267	14
Total	37.94	12.96			
Average mean	**2.71**	**0.93**			

Table 5.3 indicated that text books were ranked as high related to allocation of budget (Mean=3.04, SD=.93), stationaries were rated as high (Mean=2.96, SD=.87). The following items such as school plants, classroom(audio-visual aids, erasers, chairs, teachers tables and chairs), salary for maintenance and housekeeping staff, maintenance and housekeeping staff, laboratories, school projects, miscellaneous expenses (repairs, maintenance, sport and training), materials hall were also ranked with high magnitude, their mean values ranging between 2.51 and 3.25. On the other hand, playgrounds was ranked as low magnitude (Mean=2.48, SD=.1.01), buildings (administrative and academic) was also rated as low (Mean=2.46, SD=.95) and library with its mean value (Mean=2.32, SD=.96) was rated as low. Finally, the average mean from teachers and head teachers' perceptions rated financial resources availability as high magnitude (Mean= 2.71, SD=.93). Hanushek (1981) showed that school expenditures correlate with student performance, it is to be noted that schools with enough funds to different materials, students perform better than school with inadequate funds. UNESCO (2014) indicated that allocation of budget plays a key role in the quality of education, it is in this regard that insufficiency of financing education will affect negatively quality education in any education system.

5.5 The Correlation between Availability of Materials and School Materials Utilization

Availability of materials are the educational resources which schools possess at hand, the materials assumed to correlate with school materials utilization, it is to be noted that this study sought to determine the influence of availability of materials on school materials

utilization in implementing competence based curriculum in nine years basic education of Nyamasheke district.

5.5.1 Regression Analysis between Physical Materials Availability and School Materials Utilization

The regression analysis was computed to show influence of physical materials availability on school materials utilization in nine years basic education of Nyamasheke district. Table 5.4 gives the summary of the findings on the influence of school materials utilization.

Table 5.4: Regression Analysis of Physical School Materials Availability and School Materials Utilization

Predictors	Standardized Coefficients	
	Beta	P value
textbooks	-.130	.413
classrooms space for students	.125	.445
classroom boards	-.220	.261
classroom erasers	.169	.417
classrooms chairs for teachers	-.013	.937
teachers tables	-.106	.462
audio-visuals aids	.066	.699
diagrams	.059	.766
maps	.107	.506
atlases	.183	.261
geometrical equipment	.202	.246
library	-.232	.186
physics laboratory	.093	.641
biology laboratory	-.276	.200
chemistry laboratory	-.161	.355
material halls	-.150	.447
sport ground	.078	.677
administrative offices	.235	.233
academic offices	-.230	.337
school transport	-.291	.178
stationeries	.053	.790
time keeper	.266	.128
students' computers	-.072	.806
teachers' computers	.279	.222
water tank	.160	.585
students' desks	.023	.924
school toilets	.273	.271
charts	.091	.729
special girls room with materials	.146	.477
school plants	.072	.667
projectors	-.149	.361

p >.05 Dependent variable: school materials utilization R^2 =0.427(42.7%) Adjusted R^2 =-.006 (0.6%)

Table 5.4 indicates the findings with textbooks β=-.130, p value =.413; classroom space for students β=.125, p value=.445; classroom boards β=-.220, p value=.261; classroom erasers β=.169, p value=.417; classroom chairs of teachers β=-.013, p value=.937; teachers tables β=-.106, p value=.462; audio-visual aids β=.066, p value=.699; diagrams β=.59, p value =.766; maps=.059, p value=.506; atlases β=.182, p value=.261; geometrical equipment β=.202, p value =.246;library β=-.232, p value=.186; physics laboratory β=.093, p value= .641; biology laboratory β=-.276, p value=.200; chemistry β=-.161, p value =.355; materials halls β=-.1.50, p value=.447; sport ground β=.078, p value=.677; administrative offices β=.235, p value =.233; academic offices β=-.230, p value=.337; school transport β=-291, p value =.178; stationeries β=.053, p value=.790; time keeper β=.266, p value =.128; students computers β=-.072, p value=.806; teachers computers β=279, p value =.222; water tank β=.160, p value =.585; students desks β=.023, p value=.924; school toilets β=.273, p value =.271; charts β=.091, p value =.729; special girls room materials β=.146, p value=.477; school plants β=.072, p value=.667 and projectors β=-.149, p value =.361.

Based on the findings, it is to be noted that there is no correlation between physical resources availability and school materials utilization, there is not statically significant because p value is more than α=0.005 meaning that physical resources materials are not predictors of school materials utilization

Table 5.5: Model Summary b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics	
					R Square Change	Sig. F Change
1	0.654	0.427	-0.006	0.24615	0.427	0.509

The determination coefficient (R square) from the table above which is .654 implies that 65.4% of the total variance in school materials utilization has not been explained by physical resources availability. As R2=-.006, p value=.509>.05, there is not a statistically significance of explanatory physical resources availability. Physical resources availability does not contribute to school materials utilization.

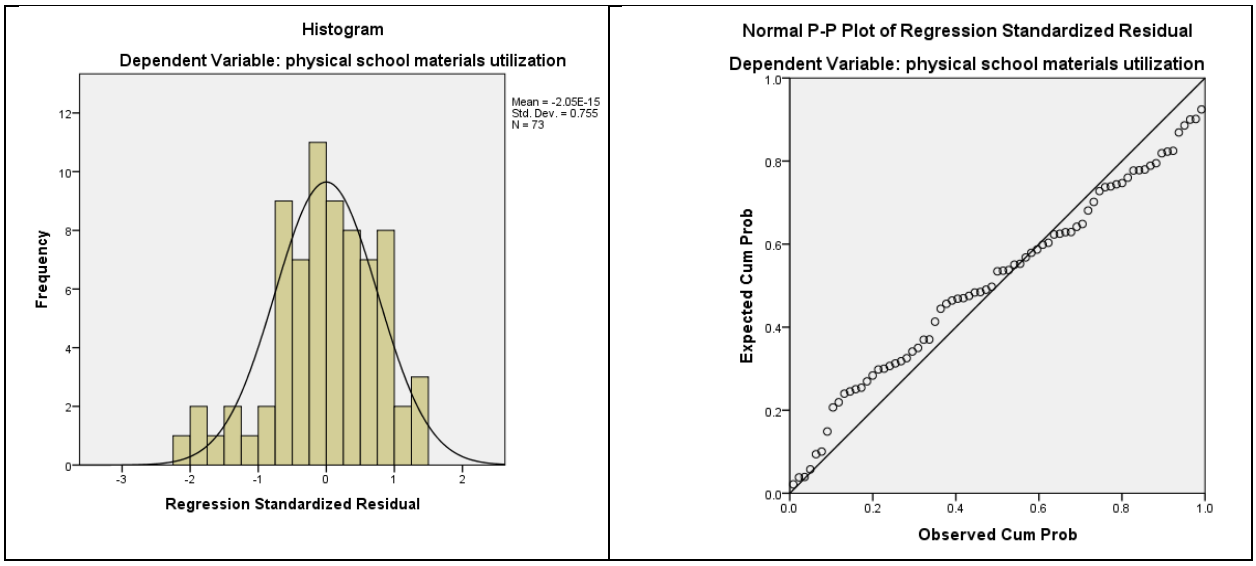

Figure 1: Histogram of Physical School Material Utilization

5.5.2 Regression analysis between human resources availability and school materials utilization

The regression analysis was computed to show influence of human resource availability on school materials utilization in nine years basic education of Nyamasheke district. Table 5.5 gives the summary of the findings on the influence of school materials utilization.

Table 5.6: Regression Analysis of Human School Materials Availability and School Materials Utilization

Predictors	Standardized Coefficients	P value
	Beta	
Teachers trained	.159	.199
Head teachers trained	-.086	.473
deputy head teachers trained	.146	.231
trained matron	.022	.861
trained patron	-.058	.631
trained accountant	.008	.946

p >.05 Dependent variable: school materials utilization R^2 =.053(5.3 %) Adjusted R^2 =-.026 (2.6%)

The results indicated in table 5.5 revealed that teachers trained β=.159, p value =.1.199; head teachers trained β=-.0.86, p value =.473; deputy head teachers trained β=.146, p value =.231; trained matron β=.022, p value =.861; trained patron β=-.058, p value =.631 and trained account β=.008, p value =.946

Based on the results from table it is clear that there is no correlation between human resources availability and school materials utilization, there is not statically significant because p value is more than α=0.005 meaning human resources materials availability are not predictors of school materials utilization.

Table 5.7: Model Summary of Human Resource

Model Summary[b]									
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Change Statistics**				
					R Square Change	**F Change**	**df1**	**df2**	**Sig. F Change**
1	.230[a]	.053	-.026	.33984	.053	.667	6	72	.676
a. Predictors: (Constant), trained accountant, head teachers trained, trained patron , trained matron , deputy head teachers trained , Teachers trained									

The determination coefficient (R square) from the table above which is .053 implies that 5.3% of the total variance in school materials utilization has not been explained by human resources availability. As R2=-.053, p value=.676>.05, there is not a statistically significance of explanatory human resources availability. Human resources availability does not contribute to school materials utilization.

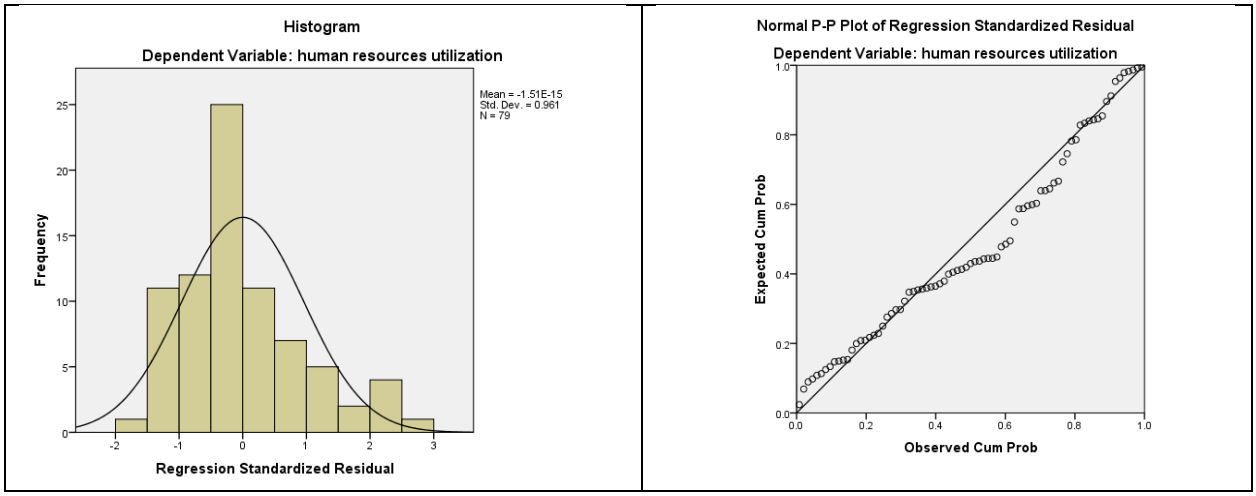

Figure 2: Histogram of Human Resource Utilization

5.7.1 Regression Analysis between Financial Resources Availability and School Materials Utilization

The regression analysis was computed to show influence of financial resources availability on school materials utilization in nine years basic education of Nyamasheke district. Table 5.8 gives the summary of the findings on the influence of school materials utilization.

Table 5.8: Regression Analysis of Financial School Materials Availability (Budget) and School Materials Utilization

Predictors	**Standardized Coefficients**	**P value**
	Beta	
text books	-.168	.154
classroom (audio-video aids , erasers, chairs, teachers tables and chairs	-.008	.947

library	.069	.576
playgrounds	-.033	.790
materials hall	-.118	.356
buildings (administrative and academic)	.261	.043*
laboratories	-.157	.206
school plants	.058	.660
stationeries	.272	.034*
school transport	.262	.042*
maintenance and housekeeping staff	.052	.684
miscellaneous expenses (repairs, maintenance, sport, training	.107	.394
salary for maintenance and housekeeping staff	.080	.521
school projects	-.247	.041*

*p value <.05 dependent variable: school materials utilization R^2 =.306(30.6 %) Adjusted R^2 =-.132 (13.2%)

The findings portrayed in table 5.8 indicated that buildings (administrative and academic) β=.261, p value=.043 <.005 is a statistically significant predictor of school materials utilization. The table indicates that there a significant difference the schools with buildings and school materials utilization as shown by the standardized beta. A further look at table 5.8 indicates that stationeries is another predictor of school materials with the value of standardized beta weight (β=.272, p value=.034<.05) meaning that the schools with stationeries used them compared to schools without stationeries. Another look on table 5.8 showed that school transport is a predictor of school materials utilization with the value of standardized beta weight (β=.262, p value =.042<0.5). Another predictor of school materials utilization is school projects with (β=-.247, p value=.41<.05) it is to be noted that for every one unity of increase in school projects, the school materials utilization decreases 0.41. This therefore implies that schools with projects utilize school materials more than the schools without projects. On the other hand text books β=-.168, p value =.154; classroom (audio-visual aids, erasers, chairs, teachers tables and chairs) β=-.008, p value =.947; library β=.069, p value =.576; play grounds β=-.033, p value=.790; materials hall β=-.118, p value =.356; laboratories β=-.157, p value=.206; school plants β=.058, p value=.660; maintenance and housekeeping staff β=.052, p value=.684; miscellaneous expenses (repairs, maintenance, sport and training β=.107, p value=.684 and salary for maintenance and housekeeping staff β=.080, p value=.521, all these listed items are not correlated with school materials utilization due their p values more than α=.05 meaning that they are not predictors of school materials utilization. This findings conflict with that one of Obadara et al. (2010) who found that financial and human resources allocated to secondary schools significantly influence student's performance.

Table 5.9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.553[a]	.306	.132	.25080	.306	1.762	14	56	.069
a. Predictors: (Constant), school projects, laboratories, text books, playgrounds, school plants, classroom (audio-video aids, erasers, chairs, teachers tables and chairs, salary for maintenance and housekeeping staff , materials hall, stationeries, library, miscellaneous expenses (repairs, maintenance, sport, training, maintenance and housekeeping staff , buildings (administrative and academic), school transport									
b. Dependent Variable: school resources utilization									

The determination coefficient (R square) from the table above which is .306 implies that 30.6% of the total variance in school materials utilization has been explained by financial resources availability. As R2=-.132, p value=.069>.05, there is weak statistically significance of explanatory financial resources availability. Financial resources availability contributes not much on school materials utilization.

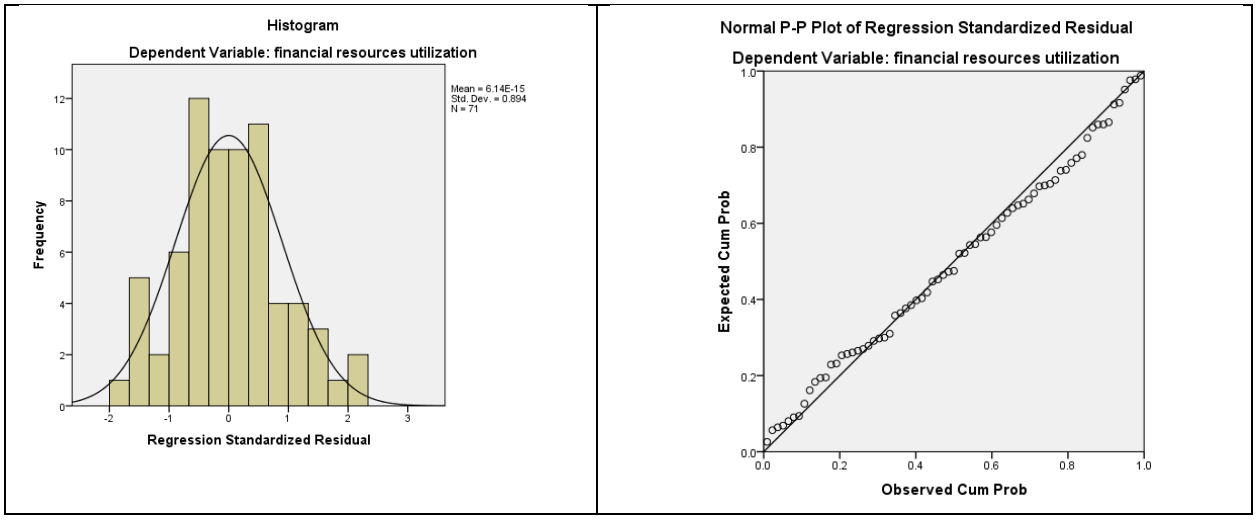

Figure 3: Histogram of Financial Resource Utilization

6. Conclusion and Recommendation

In conclusion, school materials availability and school materials utilization are very important in every education system of a country so that students can acquire knowledge, skills, attitude and values, it is to be noted that skilled graduates get employed than unskilled people.

Basing on the findings the study showed that the average mean from respondents perceptions on the level of physical school resources rated as low with (Mean=2.50, SD=.83) meaning that physical educational resources are not sufficient in nine years basic education, these results corroborates with the remarks of Bizimana& Orodho (2014) stating that a positive and significant correlation between most of the teaching and learning resources and level of classroom management and content delivery. The study

indicated that administrative staff such head teachers, deputy head teachers, matron, patron and accountant are not sufficient and need training on competence based curriculum (human resources with Mean average mean which is low (Mean=2.33, SD=0.95). The study also showed that the budget (Financial resources availability) allocated to school educational resources as high magnitude with average (Mean=2.71, SD=.93) from teachers and head teachers' perceptions. Therefore, it is to be noted that there is no correlation between physical resources availability and school materials utilization, there is not statically significant with p value is more than α=0.005 meaning that physical resources materials availability are not predictors of school materials utilization, there is no correlation between human resources availability and school materials utilization, there is not statically significant with p value which more than α=0.005 that's to mean human resources materials availability are not predictors of school materials utilization. Finally, study showed that buildings (administrative and academic), stationeries, school transport and school projects are predictors of school materials utilization, but financial resources availability contributes not much on school materials utilization.

The study recommend to the government with its stakeholders to increase the physical school educational resources, in service training teachers, recruitment more teaching staff and augment human resources and increase the budget allocated to educational resources in order to implement competence based curriculum in nine years basic education of Nyamasheke District and also to provide buildings (academic and administrative), stationeries, transport and school projects to schools.

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